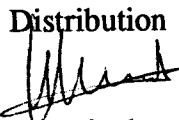



7 March 1994

To: Distribution

From:

   
H. Wienke and O. Schwerer.

Subject: 1) Photonuclear data entry in TRANS 2133 (entry 22242)  
2) Comments on TRANS 1254, 2133 and 4094

1. Photonuclear data entry in TRANS 2133

Entry 22242 in TRANS 2133 contains photonuclear data (photodisintegration of the deuteron by polarized photons) which should not be transmitted as an area three entry. We propose to delete the entry under this accession number and to retransmit it under a suitable accession number to be determined, e.g. give it a special number within the G series (which in this case should be G2001) like has been done earlier with entry D2001 containing charged-particle data compiled at NEA-DB.

2. Comments on TRANS 1254, 2133, 4094

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Comments on TRANS 1254

Entry	Subent	Line(s)	Comment
13505	4	9-11	'E-EXC = 0' should go in separate subentry with REACTION (N,EL) rather than (N,INL),PAR.
13587	6		Exponents must be right-adjusted within this data field.

Comments on TRANS 2133

Entry	Subent	Line(s)	Comment
22231 *)	1	46	Keyword MONITOR should be used. Code ASSOP should be removed (kinematically complete measurement). Both methods (nucl. emul. techn., TOF+PHD) should be split up into appropriate subentries (002-007, 008 resp).
		72-83	
	All 2,3,5	92-110	Codes TRD and SCIN should be used. Both detectors should be split up into appropriate subentries (002-007, 008 resp). Code ERR-T should be used.
		3	Secondary energies in DATA section and E-LVL of Be-9/C-12 should be coded under EN- SEC, and the latter also in COMMON section.
		4	Reaction should be coded as in sub. 006,007. Keyword DECAY-DATA should be deleted. E-LVL of Be-9 should be coded under EN-SEC, and in the COMMON section.
		4	Secondary energies in DATA section and Be-8 ground-state should be coded under EN-SEC, and the latter also in COMMON section.
6,7			
8	3	Illegal reaction code. Use (N,N+2A)2-HE-4.	

Comments on TRANS 2133 (cont.)

Entry	Subent	Line(s)	Comment
22232 *)	1	3	Comma missing before issue no.
		19	Use codes COIN, TOF.
		27	Use code MWPC.
		30-31	Move sentence to free text under METHOD.
	2		Incident energy missing, keyword INC-SPECT should be used and EN-MEAN or EN-DUMMY be coded in COMMON section of subent 1 or 2.
22233 *)	2		Incident-neutron energy missing (put in COMMON section).
		3	Modifier REL/MXW should be given in SF8.
		21	Should probably be E-ERR.
		31	ERR-S should be used.
		32	ARB-UNITS should be used as data unit.
		33-142	Illegal data fields in several data lines (wrong position).
22234 *)	2-7		Incident-neutron energy missing.
		3	Possibly modifier MXW or SPA missing in REACTION SF8.
		4	Wrong nuclide in DECAY-DATA (C0-60-m).
22235	1	48	Replace DATA-ERR with ERR-T.
		2	Idem.
		13	Exponents should be right adjusted.
22236	1	13	Use INC-SOURCE.
		27	Replace DATA-ERR with ERR-T.
	2	1	Date missing.
		7	EN-RES should be used.
22237	1	14-16	Move free text to METHOD.
		35,36	Delete codes ERR-S and ERR-1.
	2	9	Replace DATA-ERR with ERR-T.

Comments on TRANS 2133 (cont.)

Entry	Subent	Line(s)	Comment
<u>22238 *)</u>	1	21	Describe details of spectrum under INC-SPECT. Free text already under METHOD.
		26	Should be coded under keyword MONITOR.
		46	Missing free text.
	2-7	3	Modifier SPA should be given in SF8. <u>Inc. neutron energy missing.</u> Exponents should be right adjusted.
	2	3	Delete -G from SF4.
<u>22239 *)</u>	1		Keywords METHOD, MONITOR, DETECTOR, DECAY-MONIT (info given in main ref.) and ERR-ANALYS missing. Data in section 2 of main ref. should also be compiled (in separate subentry).
	2,3		<u>Inc. neutron energy missing.</u> Keywords <u>DECAY-DATA, INC-SPECT</u> missing.
		3	Modifier SPA should be given in SF8.
22240	1	23	Should be coded under keyword MONITOR.
		34	Code NAICR should be given.
		55	Free text should be given.
	2-4	3	SF4 should be blank if SF5-8 is resonance parameter.
		10	Put EN-RES into COMMON section.
22241 *)	2-9		Incident neutron energy missing.
	2-5	3	Code CMP should be explained or, if the data were derived for natural Ti, SF1 should be 22-TI-0 (and the compounds be mentioned under SAMPLE).
	5-9	3	Reaction product missing in SF4.
22243	1	39	Reaction product missing in SF4.
		49	Replace DATA-ERR with ERR-S.
	2	10	Idem.
22244	1	38	Reaction product missing in SF4.
		55	Replace DATA-ERR with ERR-S.
	2	10	Idem.

Comments on TRANS 2133 (cont.)

Entry	Subent	Line(s)	Comment
22245 *)	2-4	3	Reaction product missing in SF4.
	4	10	DATA-ERR missing. ERR-ANALYS in subent 1 should be split up into appropriate subentries or code DATA-ERR be omitted in subent 1
	5-8		These subents should be deleted, outside scope of EXFOR (SPC may be used only for gamma intensities).
22246 *)	1	15-17 37	Delete, or move free text to METHOD. SF3 must be N+P. Keyword ERR-ANALYS missing.
	2-6		Incident-neutron energy missing.
	3-5		DECAY-DATA missing (data for M2 state).
	5	5	SF3 must be INL.
22247 *)	1	15	Delete keyword IN-SPECT, it is normally used only when spectrum averaged cross sections are given (with SPA or MXW in REACTION SF8), or when details of the spectrum are given.
		17-29	Free text should be split up into SAMPLE and MONITOR.
	2,3	65 11	Replace DATA-ERR with ERR-T. Idem. Replace EN-MEAN with EN.
22248	1	13 43	Delete keyword IN-SPECT. Replace DATA-ERR with ERR-T.
	2,3	11	Idem. Replace EN-MEAN with EN.
22249 *)	2		Incident neutron energy missing.
		3	Modifier MXW should be given in SF8.
		5-11	Keywords INSTITUTE, FACILITY, INC-SOURCE, INC-SPECT and METHOD already present in subent 1.
		24	EN-ERR must be E-ERR.
		34 36-503	Code ERR-S should be used. Exponents should be right adjusted.

Comments on TRANS 2133 (cont.)

Entry	Subent	Line(s)	Comment
<u>22250 *)</u>	1	57	Free text missing.
	2-7		<u>Independent variable missing</u> (incident neutron energy: EN, or resonance energy: EN-RES).
	2,3	3	AH only for resonance parameters ( see DICT. 36). Therefore it is an illegal REACTION in these cases.
<u>22251 *)</u>	2-10	3	<u>Incident neutron energy missing</u>
		3	SF4 wrong, should be SF1.
		3	Code SIG should be replaced with DA in SF6.
	2,6,8,9		PAR in SF5 should be deleted.
	8	3	(N,N) illegal, must be (N,EL) or (N,INL) or (N,SCT).
<u>22252 *)</u>	1	15	<u>Incident-neutron energy missing</u> .
		44	Delete keyword INC-SPECT and move text to more appropriate keyword ( e.g. METHOD). Replace DATA-ERR with ERR-S.
	2,3		Delete keyword INC-SOURCE (already present in subent 1 with the same free text) and keyword INC-SPECT.
		4	Replace DATA-ERR with ERR-T. (N,N) must be (N,INL).

Comments on TRANS 4094

Entry	Subent	Line(s)	Comment	
40508	1	8	Code obsolete (4RUSKUR).	
	2-3	3	PAR in Sf5 should be deleted.	
	8-9	3	Idem.	
	9	1	Subent alter code missing.	
41067	1	7	Code obsolete (4RUSFEI).	
41102	1	4	Code obsolete (4UKRKGU).	
		5-6	Delete references, they seem to be already in appropriate subentries. Remove Q-VAL from DATA-sections.	
41103 *)	1	6	Code obsolete (4RUSNIR).	
		13	Should probably be BA-133-G.	
	7	3	Code AV missing in Sf8.	
41105	1	5	Code obsolete (4RUSKUR).	
41106	1	6	Code obsolete (4KASKAZ).	
41109 *)	1	8	Code obsolete (4RUSFEI)	
		2-6,8-10	3	Modifiers in SF8 not explained in free text.
		5, 8-10	18	Wrong data-unit, use ARB-UNITS.
<u>41120 *)</u>	2-4		If SPA in SF8, then 1) INC-SPECT must be given. 2) EN must be replaced by EN-MEAN or EN-DUMMY.	
		6	3	Otherwise delete SPA from SF8. Code AV missing in SF8.
41124	3,6,7,10, 11		Pointer 3 missing in col. 66, in DATA-section.	
41128	10	8	Should probably be EN-MIN, EN-MAX respectively.	
	2,3		Pointer 3 missing in col. 66, in DATA-section.	

Comments on TRANS 4094 (cont.)

Entry	Subent	Line(s)	Comment
41130	2,3	3	Code SPA missing in SF8.
41131	2,3	3	Idem.
41133	2,3	3	Idem.

\*) Retransmission requested.